

REMARKS

The pending Office Action addresses claims 1-41, of which claims 1-19, 35, and 41 are withdrawn. Claims 20-34 and 36-40 stand rejected. Applicants respectfully request reconsideration in view of the remarks herein.

Claim Rejections Pursuant to 35 U.S.C. § 102(b)

Claims 20-29, 32, and 37 are rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,432,050 ("Porat"). Applicants respectfully disagree.

Claim 20

Independent claim 20 recites an acoustic monitoring device for verifying the pressure setting of a valve mechanism in an implantable device having a plurality of adjustable valve settings. The acoustic monitoring device includes a transmitter configured to generate an energy field sufficient to effect movement of the valve mechanism of the implantable device and an acoustic sensor electronically coupled to the transmitter for detecting acoustic signals generated by the valve mechanism during an adjustment cycle.

Porat fails to teach or even suggest the device of claim 20 because it lacks a transmitter configured to generate an energy field sufficient to effect movement of a valve mechanism. The Examiner argues that the transducer (214) shown in Figure 13 of Porat forms the claimed transmitter. *Office Action* at 3. The Porat transducer (214), however, is not capable of effecting movement of a valve mechanism, much less capable of doing so by generating an energy field. Rather, the transducer (214) merely converts electrical sensor readings into an acoustic signal, which is then propagated through the patient to external transducers (321) for analysis by a control console (124). *Porat* at FIG. 10; col. 20, lns. 13-20; col. 16, lns. 63-67. No explanation is provided by the Examiner or the Porat reference itself as to how sound waves emitted from a transducer could effect movement of a valve mechanism. In fact, Porat expressly states that it is the extracorporeal station (130) that opens the valve (105), not the transducer (214) as suggested by the Examiner. *Porat* at col. 20, lns. 21-26. Accordingly, the Porat transducer (214) cannot form the claimed transmitter, and since no other element or structure in Porat is configured to generate an energy field sufficient to effect movement of a valve mechanism, Porat necessarily lacks the transmitter of claim 20.

Porat also fails to teach or suggest the device of claim 20 because it lacks an acoustic sensor for detecting acoustic signals generated by a valve mechanism during an adjustment cycle. The Examiner argues that the pressure sensors (212) shown in Figure 12 of Porat form the claimed acoustic sensor. *Office Action* at 3. The Porat pressure sensors (212), however, are incapable of detecting acoustic signals generated by a valve mechanism during an adjustment cycle. First, there is no indication in Porat that the valve (105) is even adjustable at all, much less that it emits acoustic signals while being adjusted. Moreover, even if the valve (105) did produce an acoustic signal, it could not possibly be detected by the pressure sensors (212), as they are designed merely to sense the pressure of a patient's cerebrospinal fluid. In addition, the location of the pressure sensors (212) within the patient's brain would prevent them from detecting subtle noises generated by a valve (105) located several inches away in the patient's neck. *See Porat* at FIG. 11. Porat thus lacks an acoustic sensor for detecting acoustic signals generated by a valve mechanism during an adjustment cycle, as further required by claim 20.

Accordingly, claim 20 differentiates over Porat and represents allowable subject matter. Claims 21-29 and 32 are allowable at least because they depend from an allowable base claim.

Claim 37

Independent claim 37 recites an acoustic monitoring system for verifying the pressure setting of a valve mechanism in an implantable device having a plurality of adjustable valve settings. The system includes a device for adjusting an opening pressure of the valve mechanism and a transmitter configured to generate an energy field sufficient to cause movement of the valve mechanism. The system also includes an acoustic sensor electrically coupled to the transmitter for detecting acoustic signals generated by the valve mechanism during an adjustment cycle, wherein the transmitter communicates the detected acoustic signal to the device for analysis.

Porat fails to teach or even suggest the system of claim 37 because it lacks a device for adjusting the opening pressure of a valve mechanism. At the outset, Applicants note that the Examiner has failed to point out in the office action what element or structure of Porat is relied upon to disclose this limitation of claim 37. Nonetheless, there is simply no discussion or suggestion anywhere in Porat of a valve whose opening pressure can be adjusted, much less a device capable of performing the adjustment. Accordingly, Porat does not anticipate the system of claim 37.

Furthermore, for the same reasons discussed above with respect to claim 20, Porat also lacks a transmitter configured to generate an energy field sufficient to cause movement of a valve mechanism and an acoustic sensor electrically coupled to the transmitter for detecting acoustic signals generated by a valve mechanism during an adjustment cycle, as further required by claim 37.

Porat is thus deficient with respect to at least three limitations of claim 37 and therefore the claim distinguishes over Porat and represents allowable subject matter. Claims 38-40 are allowable at least because they depend from an allowable base claim.

Claim Rejections Pursuant to 35 U.S.C. § 103(a)

Dependent claims 30-31, 33-34, 36, and 38-40 are rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Porat in view of U.S. Patent No. 6,533,733 ("Ericson") and in further view of U.S. Patent No. 6,082,367 ("Greeninger"). Each of these secondary references is merely relied on to teach discrete features recited in the dependent claims, and none of these references remedy the deficiencies of Porat discussed above with respect to the independent claims. Claims 30-31, 33-34, 36, and 38-40 are therefore non-obvious and allowable at least because they depend from allowable base claims.

Conclusion

Applicants submit that all claims are in condition for allowance, and allowance thereof is respectfully requested. The Examiner is encouraged to telephone the undersigned attorney for Applicants if such communication is deemed to expedite prosecution of this application.

Respectfully submitted,

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